in the second of the Madeson Second

## ENHANCED EXPRESSION OF TRANSGENES

## **ABSTRACT**

The present invention provides for improved methods of gene transfer, both *in vitro* and *in vivo*. By treating neoplastic cells with a DNA-damaging agent prior to transduction with a transgene, the expression of the transgene is improved up to about 3-fold over the expression seen in the absence of the DNA-damaging agent treatment. This effect is not dependent on the tumor cell type, the method of DNA transduction or type of DNA-damaging agent. The effect is most dramatic when the transduction is performed about 1-3 days following treatment with the DNA-damaging agent.

10

5